

CLAIMS

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1. A method of irrigating a crop area of at least 1000m<sup>2</sup> by pumping water through feed ducting and a mixing zone to a spray manifold supplying one or more spraying devices by which the water is sprayed onto the crop area and in which a substantially stable dispersion in a liquid of water soluble polymer particles is metered at a predetermined rate of 0.5 to 30ppm into the water at or before the mixing zone and the polymer particles are substantially dissolved into the water before the water is sprayed from the spraying devices.

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2. A method according to claim 1 in which the substantially stable dispersion is a reverse phase emulsion of aqueous particles of polymer dispersed in a non-aqueous liquid.

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3. A method according to claim 1 in which the substantially stable dispersion is a reverse phase emulsion of substantially anhydrous particles of polymer dispersed in a non-aqueous liquid.

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4. A method according to claim 1 in which the substantially stable dispersion is a dispersion of polymer particles in an aqueous phase containing a concentration-dependent solubilisation inhibitor.

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5. A method according to claim 4 in which the solubilisation inhibitor includes an electrolyte which is a fertiliser.

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6. A method according to claim 4 in which the solubilisation inhibitor includes ammonium sulphate.

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7. A method according to claim 1 in which the polymer is a synthetic polymer having intrinsic viscosity at least 4 dl/g formed from water soluble ethylenically unsaturated monomer or monomer blend.

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8. A method according to claim 7 in which the polymer is formed from 100 to 30% by weight acrylamide and 0 to 70% by weight ethylenically unsaturated anionic monomer.

9. A method according to claim 1 in which the each spraying device comprises an elongate spray member each of

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12

which has a plurality of spray orifices distributed along its length and the spray orifices have a diameter of at least 3 mm.

10. A method according to claim 1 conducted using a spray apparatus comprising a housing, a water inlet to which water feed ducting can be attached, the spray manifold, the mixing zone, and a water supply passage leading from the inlet through the mixing zone to the manifold.

11. A method according to claim 10 in which there is a filter in the passage and the dispersion is metered into the passage on the inlet side of the filter.

12. A method according to claim 1 conducted using a pivot irrigator.

13. A method according to claim 1 in which the crop area is at least 50,000 m<sup>2</sup>.